The draftwatermark package[*]

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Abstract

The draftwatermark package extends LaTeX providing a means to add a textual (usually light gray, but possibly colored) watermark on every page or on the first page of a document. Typical usage may consist in writing words such as *DRAFT* or *CONFIDENTIAL* across document pages. The package may remind in some sense draftcopy by Dr. Juergen Vollmer, but its implementation is much lighter (as the reduced code footprint shows) and does not rely on postscript specials, making the package fully compatible with pdfLaTeX. The package depends on everypage by the same author.

1   Introduction

This program extends LaTeX providing a means to add a textual, (usually light gray, but possibly colored) watermark on every page or on the first page of a document. Typical usage may consist in writing words such as *DRAFT* or *CONFIDENTIAL* across document pages. The package may remind in some sense draftcopy by Dr. Juergen Vollmer, but its implementation differs by a few points:

1. Code footprint is much, much smaller (about one order of magnitude smaller), although this does not mean much on modern computers.

2. There is no use of Postscript specials or other driver-dependent tricks, so the package should be compatible with any output driver and with pdfLaTeX in particular. Lack of compatibility with pdfLaTeX in these days is the biggest pitfall of draftcopy and was the first motivation for writing draftwatermark.

3. Reduced code footprint comes at some price with regards to features. Many features of draftcopy are not supported here, most notably draftwatermark has:

   - No automatic selection of the watermark text to use, depending on the language, using translations of the word "DRAFT". However, this is no big loss, since there is a possibility to set the text to use explicitly, and this leaves the

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[*]This file (`draftwatermark.dtx`) has version number 1.2, last revised 2015/02/19.
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freedom to chose whatever text one happens to prefer, including things that have nothing to do with the word "DRAFT" (e.g., "CONFIDENTIAL", "FOR YOUR EYES ONLY", etc.).

- No possibility to watermark only the first *two* pages of a document. However, it is possible to watermark only the first.

Other features available as options in draftcopy (e.g., the possibility of time-stamping the watermark text) can be obtained working on the watermark text itself.

4. Dependence on the everypage package by the same author.

2 User interface

When loaded, draftwatermark sets up a number of defaults (detailed later and modifiable by specific commands) and immediately becomes active.

2.1 Package options

If loaded as

```
\usepackage{draftwatermark}
```

the package sets up itself to put a background text on every page. Alternatively, if loaded as

```
\usepackage[firstpage]{draftwatermark}
```

the package sets up itself to put a background text only on the first page.

If loaded as

```
\usepackage[nostamp]{draftwatermark}
```

the package does not print any watermark even if it is loaded and configured to do so. This is handy for quickly removing the "draft" status from a document. Option final is a synonym for nostamp. This can be handy because final is a commonly used global option that can be simultaneously obeyed by many packages (e.g., to include figures, remove marks, and so on). The option stamp can be used to override a global final option and to recover the watermarking.

2.2 Default behavior and commands to modify it

The package defaults are illustrated in table 1.

With reference to the defaults, note that:

1. the watermark font size cannot exceed a maximum value that is about 5 cm.

2. the watermark scale can be any value. Using the default, the word "DRAFT" at 45° uses up all the space on an A4 paper. To have a good looking large text, it is better to enlarge the font size as much as possibile, rather than using a small font size and pumping up the scale.

Behavior	Default value
Angle at which the watermark text is drawn	45°
Color of the watermark text	gray 80%
Font size of the watermark text	5 cm
Horizontal center of watermark text	.5pagewidth
Scaling of the watermark text	1.2
Vertical center of watermark text	.5pageheight
Watermark text	DRAFT

Table 1: Package defaults.

3. the watermark horizontal and vertical centers define the center of the text. Origin is upper left corner of page and values are positive.

\SetWatermarkAngle
\SetWatermarkColor
\SetWatermarkFontSize
\SetWatermarkScale
\SetWatermarkHorCenter
\SetWatermarkVerCenter
\SetWatermarkText

Table 2 illustrates the commands used to modify the package behaviour.

Behavior	Command affecting it
Angle at which the watermark text is drawn	`\SetWatermarkAngle{`$\langle real\rangle$`}`
Color of the watermark	`\SetWatermarkColor ` $\langle col\_spec\rangle$
Lightness of the watermark text (1=white, 0=black)	`\SetWatermarkLightness{`$\langle real\rangle$`}`
Font size of the watermark text	`\SetWatermarkFontSize{`$\langle length\rangle$`}`
Scaling of the watermark text	`\SetWatermarkScale{`$\langle real\rangle$`}`
Horizontal center of watermark text	`\SetWatermarkHorCenter{`$\langle length\rangle$`}`
Vertical center of watermark text	`\SetWatermarkVerCenter{`$\langle length\rangle$`}`
Watermark text	`\SetWatermarkText{`$\langle text\rangle$`}`

Table 2: Commands affecting the package behavior.

Note that $\langle col\_spec\rangle$ can be either a named color such as `{`$\langle name\rangle$`}` or a color specification such as `[`$\langle model\rangle$`]{`$\langle specs\rangle$`}`. For instance

```
\SetWatermarkColor{red}
\SetWatermarkColor[rgb]{0,1,0}
```

\SetWatermarkLightness are both valid colors. Also note that the command

```
\SetWatermarkLightness{⟨real⟩}
```

is provided as a conveniency (and for backward compatibility) to select gray watermarks (1=white, 0=black).

Observe that the `\SetWatermarkFontSize`, `\SetWatermarkHorCenter` and `\SetWatermarkVerCenter` commands take a length rather than a simple number. Also observe that multiline textual watermarks can easily be obtained by the

3

`\shortstack` command and that there is the possibility of using an image rather than a text (e.g., a "caution, work in progress" sign, etc.).

Note that once the package is loaded, there is no way to stop it. In order to have textual watermarks that appear only when specific conditions are met, conditionals must be included in the watermarks.

Eventually consider that no special assumption is made on the LaTeX output driver, so draftwatermark should work equally well with LaTeX and pdfLaTeX. Furthermore, the package should work equally well with the dvi, dvips, etc. output drivers. Obviously, the final compatibility with the different output drivers depends on the actual code that is placed in the textual watermark.

3 Example

As an example, consider the following code snippet:

```
 1 \documentclass{article}
 2 \usepackage[utf8]{inputenc}
 3 \usepackage[T1]{fontenc}
 4 \usepackage{mathptmx}
 5 \usepackage{draftwatermark}
 6 \title{Sample document for the draftwatermark package}
 7
 8 \begin{document}
 9 \maketitle
10
11 \section{One}
12 This text is here just to fill in some space. This text is here just to
13 fill in some space. This text is here just to fill in some space. This
14 text is here just to fill in some space. This text is here just to fill in
15 some space. This text is here just to fill in some space. This text is
16 here just to fill in some space. This text is here just to fill in some
17 space. This text is here just to fill in some space. This text is here
18 just to fill in some space. This text is here just to fill in some
19 space. This text is here just to fill in some space. This text is here
20 just to fill in some space. This text is here just to fill in some
21 space. This text is here just to fill in some space. This text is here
22 just to fill in some space. This text is here just to fill in some
23 space. This text is here just to fill in some space. This text is here
24 just to fill in some space. This text is here just to fill in some
25 space. This text is here just to fill in some space.
26
27 \section{Two}
28
29 Also this text is here just to fill in some space. Also this text is here
30 just to fill in some space. Also this text is here just to fill in some
31 space. Also this text is here just to fill in some space. Also this text
32 is here just to fill in some space. Also this text is here just to fill in
33 some space. Also this text is here just to fill in some space. Also this
34 text is here just to fill in some space. Also this text is here just to
```

```
35 fill in some space. Also this text is here just to fill in some
36 space. Also this text is here just to fill in some space. Also this text
37 is here just to fill in some space. Also this text is here just to fill in
38 some space. Also this text is here just to fill in some space. Also this
39 text is here just to fill in some space. Also this text is here just to
40 fill in some space. Also this text is here just to fill in some space.
41
42 \end{document}
```

4   Development and support

The package is developed at *github*:

> `https://github.com/callegar/LaTeX-draftwatermark`

Please refer to that site for any bug report or development information.

5   Changelog

1.0 - 2006/06/30 Initial version.

1.1 - 2012/01/06 Add support for colored watermarks; Options to disable watermarking; Many small fixes in the documentation.

1.2 - 2015/02/19 Add support for watermark position.

6   Implementation

Announce the name and version of the package, which requires LaTeX 2$_\varepsilon$.

```
43 \NeedsTeXFormat{LaTeX2e}
44 \ProvidesPackage{draftwatermark}%
45   [2015/02/19 1.2 Put a gray textual watermark on document pages]
```

Require the needed packages. Note that if these are pre-loaded before loading draftwatermark, using suitable options to preset behavior for a desired output driver, this is used also here.

```
46 \RequirePackage{everypage}[2007/06/20]
47 \RequirePackage{graphicx}
48 \RequirePackage{color}
```

\if@sc@wm@first   Set up the conditional to store whether a watermark is needed only on the first page or everywhere.

```
49 \newif\if@sc@wm@first
50 \@sc@wm@firstfalse
```

\if@sc@wm@stamp   Set up the conditional to store whether to stamp the watermark or not.

```
51 \newif\if@sc@wm@stamp
52 \@sc@wm@stamptrue
```

Declare the package options.

```
53 \DeclareOption{firstpage}{%
54   \@sc@wm@firsttrue}
55 \DeclareOption{nostamp}{%
56   \@sc@wm@stampfalse}
57 \DeclareOption{final}{%
58   \@sc@wm@stampfalse}
59 \DeclareOption{stamp}{%
60   \@sc@wm@stamptrue}
61 \ProcessOptions
```

\sc@wm@angle
\sc@wm@colormodel
\sc@wm@colorspecs
\sc@wm@scale
\sc@wm@hcenter
\sc@wm@vcenter
\sc@wm@fontsize
\sc@wm@text

Set up the package defaults.

```
62 \newlength\sc@wm@hcenter
63 \newlength\sc@wm@vcenter
64 \newlength\sc@wm@fontsize
65 %% defaults
66 \def\sc@wm@angle{45}
67 \def\sc@wm@colormodel{[gray]}
68 \def\sc@wm@colorspecs{0.8}
69 \def\sc@wm@scale{1}
70 \setlength\sc@wm@hcenter{.5\paperwidth}
71 \setlength\sc@wm@vcenter{.5\paperheight}
72 \setlength\sc@wm@fontsize{5cm}
73 \def\sc@wm@text{DRAFT}
```

\SetWatermarkAngle
\SetWatermarkColor
\SetWatermarkLightness
\SetWatermarkFontSize
\SetWatermarkScale
\SetWatermarkHorCenter
\SetWatermarkVerCenter
\SetWatermarkText

Set up the commands to modify the behavior.

```
74 \newcommand\SetWatermarkAngle[1]{%
75   \def\sc@wm@angle{#1}}
76 \newcommand\SetWatermarkColor{}
77 \def\SetWatermarkColor#1#{\sc@setWatermarkColor{#1}}
78 \def\sc@setWatermarkColor#1#2{%
79   \def\sc@wm@colormodel{#1}%
80   \def\sc@wm@colorspecs{#2}}
81 \newcommand\SetWatermarkLightness[1]{%
82   \SetWatermarkColor[gray]{#1}}
83 \newcommand\SetWatermarkFontSize[1]{%
84   \setlength\sc@wm@fontsize{#1}}
85 \newcommand\SetWatermarkScale[1]{%
86   \def\sc@wm@scale{#1}}
87 \newcommand\SetWatermarkHorCenter[1]{%
88   \setlength\sc@wm@hcenter{#1}}
89 \newcommand\SetWatermarkVerCenter[1]{%
90   \setlength\sc@wm@vcenter{#1}}
91 \newcommand\SetWatermarkText[1]{%
92   \def\sc@wm@text{#1}}
```

\sc@watermark The command to draw the watermark... This assumes an origin in the left top corner of the page (and also assumes that \paperwidth and \paperheight are set correctly if accepting the defaults). There is no need to worry about the horizontal and vertical size that

is taken by the watermark object. Note that this is typically a text, but `\sc@wm@text` may well contain other material, e.g. an `\includegraphics` directive.

```
93 \newcommand\sc@watermark{%
94   \setlength{\@tempdimb}{\sc@wm@hcenter}%
95   \setlength{\@tempdimc}{-\sc@wm@vcenter}%
96   \put(\strip@pt\@tempdimb,\strip@pt\@tempdimc){%
97     \makebox(0,0){\rotatebox{\sc@wm@angle}{%
98       \scalebox{\sc@wm@scale}{%
99         \expandafter\expandafter\expandafter\textcolor
100        \expandafter\sc@wm@colormodel\expandafter{\sc@wm@colorspecs}{%
101          \fontsize{\sc@wm@fontsize}{1.2\sc@wm@fontsize}
102          \selectfont
103          \sc@wm@text}}}}}}
```

`\sc@wm@print`   The command to actually *print* the watermark. It is assumed that this is called before any other material is shipped to the page. As such, the origin here is the page origin in Knuthian sense (1 inch down, 1 inch right from the top left corner of the page... First of all, this is changed to the proper top left corner of the page.

```
104 \newcommand\sc@wm@print[1]{%
105   \if@sc@wm@stamp
106   \setbox\@tempboxa\vbox to \z@{%
107     \vskip -1in \moveleft 1in \vbox{%
108       \hbox to \z@{%
109         #1\hss}}\vss}
110   \dp\@tempboxa\z@
111   \box\@tempboxa
112   \fi}
```

Eventually, set up the `\sc@wm@print` command to be called when needed, using the appropriate everypage hook.

```
113 \if@sc@wm@first
114 \AddThispageHook{\sc@wm@print{\sc@watermark}}
115 \else
116 \AddEverypageHook{\sc@wm@print{\sc@watermark}}
117 \fi
118 \endinput
```

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Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.